



# ADMINISTRATIVE NOTES



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of Documents  
Stop SLIC

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July 1988

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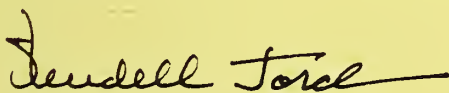
July 13, 1988


### TO MEMBERS OF THE INFORMATION COMMUNITY

On April 9, 1987, the Joint Committee on Printing passed a resolution urging the Government Printing Office to initiate a series of pilot projects to test the feasibility and practicality of disseminating government publications to Depository Libraries in electronic formats. As a result of that resolution the Government Printing Office, in consultation with the Joint Committee on Printing, has developed the enclosed plan.

At its meeting on June 29, 1988, the Joint Committee on Printing, agreed that, prior to implementation, this plan should be circulated for public comment. If you have specific comments to make regarding these test projects, please submit them to the Joint Committee on Printing by August 22, 1988.

Sincerely,

  
Wendell H. Ford  
Vice Chairman

  
Frank Annunzio  
Chairman



**FEDERAL DEPOSITORY LIBRARY PROGRAM**

**Access = Awareness**

DISSEMINATION OF INFORMATION  
IN ELECTRONIC FORMAT  
TO FEDERAL DEPOSITORY LIBRARIES

PROPOSED PROJECT DESCRIPTIONS

JUNE 1988

DISSEMINATION OF INFORMATION  
IN ELECTRONIC FORMAT  
TO FEDERAL DEPOSITORY LIBRARIES

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## I. INTRODUCTION

In 1983, the Joint Committee on Printing established the Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases. The Ad Hoc Committee submitted reports in December 1984 and January 1987 strongly recommending implementation of demonstration projects within the depository library community as a means of accurately assessing both effectiveness and economic feasibility.<sup>1,2/</sup> The Ad Hoc Committee also recommended that the Joint Committee on Printing submit a request for funding for the projects and that GPO be responsible for the "planning, administration and implementation of the projects...."<sup>3/</sup> At the direction of the Joint Committee on Printing, GPO requested \$800,000 for fiscal year 1988 for electronic dissemination pilot projects, however, these funds were not allowed by Congress.

On April 9, 1987, the Joint Committee accepted the Ad Hoc Committee's reports and passed a resolution calling for "a series of pilot projects [to] be implemented to test the feasibility and practicality of disseminating government publications to depository libraries in electronic formats."<sup>4/</sup>

## II. BACKGROUND

### Responsibility of the Government Printing Office

As authorized under Title 44 of the U.S. Code, the Government Printing Office (GPO) serves as the Federal Government's printer and primary distributor of Government publications. For purposes of distribution to the Depository Library Program, Government publications are defined as "informational matter which is published as an individual document at Government expense, or as required by law.<sup>5/</sup> The Depository Library Program guarantees public accessibility to Federal information at no cost to the user.

Government publications are provided to depository libraries in the most usable, cost effective format. Over the past ten years, Congress has authorized GPO to distribute an increasing number of suitable publications in microfiche format, in order to contain costs for the Depository Library Program. The House Appropriations Committee recently indicated its support for cost effective methods of electronic dissemination to depository libraries such as CD-ROM (Compact Disc - Read Only Memory)

format.6/

### Depository Libraries

The Superintendent of Documents is required to make available to participating libraries "government publications, except those determined by their issuing components to be...for official use only or for strictly administrative or operational purposes which have no public interest or educational value and publications classified for reasons of national security."7/

There are nearly 1,400 depository libraries throughout the United States. There is at least one depository library in every Congressional district. Fifty-three libraries have agreed to serve as regionals to maintain complete collections, allowing the other libraries to select publications according to the needs of their users. The selectives can borrow publications from the regionals.

The Patent and Trademark Office plans to provide each of its 63 libraries, many of which are also depository libraries, with a microcomputer, CD-ROM drive, and a printer. This will not only increase the number of libraries with such devices, but also gives further indication of the growing acceptance of this technology.

### Distribution of Government Information to Libraries

During FY 1987, 22.7 million copies of 58,143 titles were distributed to depository libraries. Of the total number of copies, 9.6 million (42%) were in paper while 13.1 million (58%) were in microfiche. The average number of libraries receiving any one item is 415. Where a publication is produced in microfiche and paper formats, regionals receive copies of both versions.

## III. DEPOSITORY LIBRARY PROGRAM DEMONSTRATION PROJECTS

Over the past eight years, the library community has strongly supported access to Government information in electronic format. All of the major library associations have testified to the Appropriations Committees in support of depository library access to Government publications in electronic format. The Depository Library Council to the Public Printer passed a supporting resolution in 1980, and in 1987, established a subcommittee on electronic dissemination to act as a resource during the planning and implementation of the plan.

More recently, the Association of Research Libraries (ARL) issued a report compiled by the Task Force on Government Information in Electronic Format, which supported the earlier findings of the Ad Hoc Committee. ARL believes that the Depository Library Program has reached a critical juncture -- a crossroads, if you will, to the future. ARL vigorously urges GPO, in cooperation with other Federal agencies, to institute immediate action thereby enabling depository libraries to begin receiving Government documents in electronic format.8/



## IV. DESCRIPTION OF PROPOSED PROJECTS

## Overview

This section of the plan describes possible projects to provide Government publications to depository libraries in electronic format. These or similar projects would provide GPO and depository libraries experience in dealing with these formats, help clarify policy issues, and enable GPO to begin planning for the future.

The criteria for selection of the projects include cost, willingness of the publishing agency to participate in the planning of the project, value of the information to the public, size of publication, frequency of update, search requirements, and the publishing schedule.

The five projects include a mix of formats, approaches, and types of data. Three of the projects involve CD-ROM (Compact Disc - Read Only Memory). Of the discs described herein, one will contain statistical data (Census); one will contain descriptive data in a record format (EPA); and one will contain full text (Congressional Record).

Software development is an important consideration for the increasing number of Federal agencies publishing CD-ROM products. Agencies may develop retrieval software for CD-ROM in-house, as Census has done, or contract for those services either on their own or through GPO. GPO has expanded its procurement services to include CD-ROM products and will be able to "ride" issuing agencies requisitions to obtain copies for depository libraries and for sales. If agencies contract for CD-ROM development, they (or GPO, on behalf of the depository libraries) may have to pay for software licenses for each of the CD-ROM copies that are distributed. Another possibility is for the government to negotiate for unlimited use of software for a set fee.

Two of the projects would provide on-line access to Government data bases. There can be no doubt that online information dissemination is technically possible; many libraries have offered database searching as a service to their patrons for years. In many cases, online data base searching offers significant advantages over using a printed counterpart (e.g., it may be more up-to-date, easier to search, and may save staff time previously spent cataloging and handling little-used materials). However, online information distribution may be more costly than paper distribution. Some libraries pass the cost of the more complicated and lengthy data base searches on to their patrons. The Department of Energy (DOE) project is the most far-reaching in its implications. DOE proposes a phased effort to provide



online access to the DOE Technical Information Center computer in Oak Ridge to about 20 depository libraries. The libraries would be able to utilize a "gateway" to search DOE files and/or commercial systems, download data, and communicate via electronic mail. A subsequent phase might provide electronic access to the thousands of DOE reports currently sent to depository libraries on microfiche.

As microcomputers become more and more widely used, the number of data bases containing Government information is also growing. Usually, data entered into microcomputers is administrative in nature and would not qualify for depository distribution. However, instances have been reported where agencies have discontinued printing reports in favor of distributing flexible ("floppy") disks. Future efforts may include distribution of published reports on floppy disks.

The project descriptions presented in the following pages identify costs that can be attributed to individual projects. If these projects are implemented, some additional resources may be required to support the overall program. For example, some additional equipment will be needed, such as a CD-ROM drive (\$845) and a modem (\$350). It is also estimated that the Library Programs Service would initially require the equivalent of one additional staff year to support the successful implementation of these projects.

PROJECT: Distribute a CD-ROM, software, and hard copy documentation published by the Census Bureau. The CD-ROM contains the 1982 Census of Retail Trade by Zip Code and the 1982 Census of Agriculture.

DESCRIPTION: As the nation's statistician, the Census Bureau collects and disseminates information about the population, economy, industry, and other aspects of American life. This information is used by all kinds of organizations, including Congress, Federal agencies, state and local governments, businesses, educators, associations, students and many others.

Despite the importance of Census data and the efforts of the Census Bureau to disseminate it as widely as possible, much of the information is not readily available to the public. Because of its sheer volume, much Census data is published in magnetic tape format only. Unfortunately, most libraries and certainly most individuals do not have the computing facilities and technical expertise to manipulate data in magnetic tape format. Therefore, this data is lost to large segments of the general public.

Last year, Census became the first Federal agency to publish data in CD-ROM format. Census' initial test, which involved over 30 libraries (most of which were depository libraries), as well as Census field offices and statisticians, was so successful that Census decided to expand the use of CD-ROM in future publishing efforts.

In March 1988, Census mastered a disc containing data from the 1982 Economic Census. Heretofore, this data was sold only on magnetic tape. This disc will be used to test whether parts of the 1990 Decennial Census should be published on CD-ROM. Census will provide basic search and retrieval software that they have developed. Data will be structured on the disc so that it can also be manipulated easily by dBase III and other commercially available software, which is widely used by the Federal government and other organizations. Census is in the process of developing software to facilitate downloading data to provide maximum flexibility to data users.

The Census Bureau is a good choice for a partner in a CD-ROM project because they already have expertise in this area, and Census is likely to be major publisher of CD-ROM products in the future. The Government could realize significant savings by distributing results of the 1990 Decennial Census to depository libraries in CD-ROM format instead of paper or microfiche.

Another advantage is that Census, as the originating agency, will pay for developing retrieval software and documentation and for

the mastering of the disc; GPO will pay only for the copies for the depository libraries.

Finally, this project will not entail the issue of software licensing. (Service bureaus which develop CD-ROM products under contract sometimes charge substantial fees per disc copy for use of their retrieval software.) The Census Bureau software is in the public domain.

COST PROJECTION: The total cost for this project, including materials, postage, and labor, would be approximately \$14,027 for 1,400 libraries. Contractor costs for duplicating copies of CD-ROMs and floppy disks are estimated at \$2.75 and \$5 respectively. The documentation (estimated at 100 pages) would cost about \$51 per 100 copies. Postage and handling costs are based on distributing the materials via United Parcel Service (UPS).



Publication Title: 1982 Census of Retail Trade by Zip Code and  
1982 Census of Agriculture

Source Agency : Census Bureau

Project Description: Distribute a CD-ROM, software, and hard copy documentation published by the Census Bureau.

Depository Distribution Comparisons:

1. Current costs for hard copy distribution

(NOTE: Census of Retail Trade available in magnetic tape format only. Estimated printing costs shown below are based on actual printing costs for the Census of Agriculture. Handling and postage costs not shown.)

1982 Census of Agriculture, Vol. I,	\$ 75,960
Counties - 28,000 pp./set	
(\$151.92 X 500 lbs)	

TOTAL:	\$ <u>75,960</u>
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2. Costs for electronic dissemination in CD-ROM format

CD-ROM Duplication -	\$ 3,850
(\$2.75 x 1400 lbs.)	

Floppy Disk Duplication -	7,000
(\$5 x 1400 lbs.)	

Print Documentation -	714
(\$51/100 copies x 14)	

Postage	2,086
(\$1.49 x 1400 lbs.)	

Handling	41
(3.5 hrs x \$11.83/hr)	

TOTAL:	\$ <u>13,691</u>
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PROJECT: Distribute the Toxic Release Inventory (TRI) to be published by the Environmental Protection Agency (EPA) in February 1989 to depository libraries in CD-ROM format.

DESCRIPTION: The EPA was established in 1970 to safeguard the environment through development of effective Government standards and regulations, research, monitoring, and education. As part of the Superfund Amendments and Reauthorization Act of 1986 (SARA), Congress charged the EPA with collecting and making available to the public information about over 300 toxic chemicals that are being released to the environment. Certain chemical manufacturers, processors, and users are required to submit annually a toxic chemical release form to the EPA. The release forms provide information to the Federal, state, and local governments and the public. EPA is required to make this data accessible by computer telecommunications and other means.

Between 160,000 and 300,000 release forms will be submitted to the EPA by July 1, 1988. Data collection will not be completed until about February 1989. EPA proposes to publish a CD-ROM containing the TRI data base for distribution to their field offices, as well as depository libraries.

CD-ROM format was selected for the TRI data base because of size, content, update frequency, and search requirements. EPA would contract for designing the layout of the CD-ROM and development of search software. Disc replication would be through a GPO contract.

EPA also plans to publish the TRI in printed format. It would probably be distributed to depository libraries in microfiche format, at a cost of approximately \$70,257. Distribution of this data to depository libraries in CD-ROM format instead would offer significant cost savings.

COST PROJECTION: The total cost for this project, including materials, fees, postage, and labor is estimated at \$22,319 for 400 libraries. Most of this amount, \$20,000, is to purchase software licenses to entitle disc users to use contractor-developed software. (Some companies allow publishers to purchase rights to the software outright, but licensing seems to be more prevalent in the industry.) Costs for software licenses seem to vary a great deal depending on the company, product, and the number of disc copies produced. The figure used here (\$50 per disc copy) seems to be a reasonable amount based on a recent survey of CD-ROM producers. The software license fee would include the cost of the floppy disk and documentation to support the software.

Publication Title: Toxic Release Inventory (TRI)

Source Agency: Environmental Protection Agency

Project Description: Distribute the TRI to be published in February 1989 to 400 depository libraries in CD-ROM format.

Depository Distribution Cost Comparison:

1. Current costs for microfiche distribution

Final specifications for printing the TRI will not be available until sometime after July 1988. The estimates shown below are based on EPA receiving 230,000 response forms. Based on the preliminary specifications, the TRI would probably be distributed to depository libraries in microfiche format.

Printing-	\$ 57,088
(100 sets of 3,408 fiche = \$14,272	
\$14,272 X 4 (400 libs.))	
Postage-	12,864
(\$32.16 per lib. X 400 libs.)	
Handling-	304
(contract to package, label, meter,	
and mail)	
TOTAL:	\$ 70,257

2. Costs for electronic dissemination in CD-ROM format

CD-ROM duplication -	\$ 1,700
(\$4.25 x 400 libs.)	
Software licenses -	20,000
(\$50 x 400 libs.)	
Postage-	596
(\$1.49 x 400 libs.)	
Handling-	23
(2 hrs x \$11.83/hr)	
TOTAL:	\$ 22,319



PROJECT: Distribute the final (bound) edition of the Congressional Record published by the U.S. Congress to depository libraries in CD-ROM format.

DESCRIPTION: The Congressional Record is published in two editions: 1) a daily edition is produced when Congress is in session; and 2) a cumulated final edition is prepared after the conclusion of each session of Congress.

Indexes to the daily Record are published on a biweekly basis. Indexes to the final editions of the Record are created by cumulating the biweekly indexes for each session of Congress. The cumulated indexes are edited to reflect the page numbers that appear in the final Record.

Currently, the Congressional Record is published in three formats: 1) paper (daily on newsprint, cumulated final on 40 lb offset); 2) microfiche (daily and final on 24X diazo fiche); and 3) electronic (standard 1600 BPI, ASCII, IBM compatible, 9 track magnetic tape).

While the magnetic tape format has never been offered through the Depository Library Program, until 1986 the bound Record was made available to libraries on dual format distribution (i.e., selective depositories could choose either paper or microfiche; regional depositories received both paper and microfiche). In early 1986, depository distribution of the bound Record was changed from dual format to microfiche-only, as a cost-savings response to budget cuts mandated by Gramm-Rudman-Hollings.

Recent advances in the use of CD-ROM technology seem to indicate that this format may be an appropriate alternative to microfiche distribution. Not only does CD-ROM provide much greater research capabilities to the user, it also appears that it will be less costly than microfiche. The following analysis presents the projected costs and considerations of employing CD-ROM as an alternative to microfiche for depository distribution of the Congressional Record.

#### Considerations in Publishing the final Record on CD-ROM

##### 1. Size of data base

A year of the Congressional Record is made up of approximately 413 million keystrokes, which translates to about 500 megabytes of information. In addition, the index and bill digest for a year's Record will comprise approximately 22 additional megabytes. A single, 4-3/4 inch CD will hold up to 660 megabytes of data.

The amount of data a disc can handle depends upon the type and size of the retrieval software. An initial decision must be made as to what type of software will be used, so the data can be properly structured. A year's Record on CD-ROM would be such a large data base that the response time in searching full-text on a personal computer could be quite long. Therefore, it may be more practical to include the index along with the text and have full-text searching of the index only, with the ability to directly locate in the Record, the specific index reference. It also might be possible to search on the headers in the full text.

## 2. Software

The users of data on compact discs will want to search, retrieve, and download the data onto another disk, or another computer. They also will want the capability to print a page or a smaller section of the data onto paper. The type of retrieval and on-demand printing software must be carefully chosen, in order to accommodate the variety of equipment that will be used to access the data.

## 3. Planning

A working group of technicians (GPO and JCP) and Record users (LC, House and Senate Library staff) should be established to plan the most effective way to publish the Record on CD.

## 4. Cost Projection

The basic publishing costs would include data preparation (converting the electronic data into a format suitable for CD-ROM), acquisition of retrieval software, creation of tapes containing text and index data, and procurement of the CD-ROM master disc. (GPO is in the process of leasing a CD-ROM publishing system for testing software and producing tapes for mastering discs.) The master disc and duplicate CD-ROMs would be procured from a private sector vendor.

The annual cost to the Depository Program if 1,295 depository libraries (plus 10 additional copies to replace those that may be lost or damaged) received the bound Record in CD-ROM format would be: 9/

Mastering	\$1,700
Duplicate CD-ROM Discs (@ \$2)	2,610
Duplicate Software (floppy) (@ \$5)	6,525
Documentation (@ \$.50)	653
Postage and Handling (@ \$5)	6,525
Paper Index (@ \$30.30)	<u>39,542</u>
<b>TOTAL</b>	<b>\$57,555</b>



(Postage and handling costs are based upon distributing materials via United Parcel Service.) The estimated cost for 1,305 microfiche copies of the final Record for a single session of Congress is \$158,203. For a detailed comparison, see the table below.

Estimated Cost Comparisons  
For 1,305 Depository Libraries for One Year

	<u>Microfiche</u>	<u>CD-ROM</u> 10/
Printing Costs		
<u>Record</u> Text	\$ 0	\$ 0
<u>Record</u> Index	39,542	39,542
Production Costs		
Master Copy	5,048	1,700
Duplicate Copies		
Fiche	36,892	0
CD-ROM	0	2,610
Floppy Disk	0	6,525
Postage		
<u>Record</u> Text	1,109	1,945
<u>Record</u> Index	4,085	4,085
Handling		
<u>Record</u> Text	71,123	78
<u>Record</u> Index	404	404
Documentation	<u>0</u>	<u>653</u>
Total	\$158,203	\$ 57,542

House Report 100-621 (Legislative Branch Appropriation Bill, 1989) provides the following guidance for choosing an appropriate depository format for the bound Record: "The Committee agrees with providing cost-effective methods of electronic dissemination of information to depository libraries such as CD-ROMS."11/ Thus, the choice of CD-ROM format for depository distribution of the bound Record appears to be fully consistent with the Committee's direction.

It should be noted that statistics compiled by the GAO for the recent OTA study on information technology indicate that over 40% of depository libraries already have CD-ROM readers. Given the development of commercial products now being offered on CD-ROM, it is safe to assume that in a relatively short period of time, a substantially greater number of depositories will obtain such devices. The OTA study indicates that such devices can be obtained for approximately \$845, which would appear to be well within the reach of almost any library within a relatively short period of time.

PROJECT: Provide online access to the Economic Bulletin Board sponsored by the Department of Commerce.

DESCRIPTION: The Department of Commerce offers a wide variety of programs aimed at monitoring the nation's economy and promoting economic growth through international trade, free enterprise, and technological advancement. One facet of the Department's job is to collect, analyze, and disseminate statistics representing the state of the nation's economy. This information is provided to business and Government planners to enable them to respond to national economic conditions.

One of the primary ways utilized by the Commerce Department and other Federal agencies to distribute economic news is through press releases. Such press releases sometimes contain important Government information, for example, the Consumer Price Index and national unemployment statistics. Even though press releases are clearly within the scope of the Depository Library Program as defined by Title 44 USC, it is often difficult to obtain copies for depository distribution. Agencies frequently reproduce press releases in limited quantities for immediate distribution. Attempts to acquire copies later are costly and very often futile. Even when copies can eventually be obtained, they are of less value to depository libraries because the news is no longer timely.

Another medium used to disseminate economic information is an electronic bulletin board sponsored by the Department of Commerce. The Economic Bulletin Board contains economic news and statistics published by several bureaus within the Department of Commerce, including the Bureau of Economic Analysis, Census Bureau, International Trade Administration, and NTIS, as well as the Federal Reserve Board, Bureau of Labor Statistics (Labor Department), and the Internal Revenue Service (Treasury Department). The information is contained in about 300 files which are updated within a few minutes of their release time. Updates are monthly or quarterly, depending on the release; employment statistics, for example, are updated monthly. There are currently about 900 subscribers, including about 100 libraries. The only equipment required is a "dumb" terminal, however, most subscribers use personal computers to download data to floppy disk for subsequent review and manipulation. The current equipment configuration at the Commerce Department will accommodate up to 16 simultaneous users, using 2400, 1200, or 300 baud communication.

The Commerce Department has indicated their willingness to extend access to selected depository libraries. Officials there have proposed that 100 libraries be given the opportunity to use the Economic Bulletin Board for a period of six months.



At the end of that period, the project could be evaluated and a decision made whether or not to continue the project and expand access to additional libraries.

COST PROJECTION: Commerce Department normally charges users \$25 per year plus \$6 per hour (daytime) to \$3 per hour (evenings) for access to the Economic Bulletin Board. Rather than adhering to Commerce Department's regular fee structure, GPO would pay \$5,000 for unlimited use by participating libraries for a period of six months. Commerce Department's costs for conducting this demonstration would be reduced somewhat since they would not have to register individual libraries or send bills for system use. (This arrangement would enable Commerce Department to upgrade their existing equipment to accommodate the additional users.) Telecommunication costs could be borne by the Federal Government or participating depository libraries. The estimated telecommunication costs (\$16,800) are based on a total of 2,400 hours of connect time billed at \$7/hour. The actual expense would depend on the amount of online use and the hourly rate for service, which varies significantly between carriers.



Publication Title: Economic Bulletin Board

Source Agency: Department of Commerce

Project Description: Provide unlimited online access to the Economic Bulletin Board to 100 depository libraries for a period of six months.

Depository Distribution Cost Comparison:

1. Current Costs

(NOTE: Much of the information contained on the Economic Bulletin Board is not currently being distributed to depository libraries. Also, it contains data supplied by a wide range of Federal agencies, as described in the project description. For these reasons, reliable cost figures for hard copy distribution were not available.)

According to records of system usage compiled by the Department of Commerce, one Federal depository library used the Economic Bulletin Board (EBB) 45 times to download 261 files during the first three months of 1988. The cost for 100 libraries to use the EBB to this extent for six months (a total of 2,400 hours) at regular Commerce Department rates would be about \$15,000.

2. Costs for online access

One-time fee for unlimited usage for six months	\$ 5,000
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*Telecommunications costs (2,400 hours X \$7/hour)	16,800
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TOTAL:	\$ <u>21,800</u>
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\*NOTE: Actual telecommunications costs would depend on the amount of online usage. This cost could be borne by the Federal Government or participating depository libraries.

PROJECT: Phase I - (1) Develop a "gateway" to provide 18-22 depository libraries online access to bibliographic files residing on the Department of Energy (DOE) computer and/or commercial systems; and (2) perform a study to determine the optimum media (e.g., microfiche, CD-ROM, etc.) for delivery of DOE contractor reports to depository libraries. Phase II- Depending on the results of Phase I, select and test a system for electronic delivery of full-text DOE reports.

DESCRIPTION: In FY 1987, about 14,000 Department of Energy (DOE) technical reports were distributed in microfiche format through the Depository Library Program. Under an interagency agreement between GPO and DOE, the reports are mailed to depository libraries from the DOE facility located in Oak Ridge, Tennessee. DOE pays for producing the microfiche (an estimated \$350,000/year); GPO reimburses DOE for postage and handling costs (about \$175,000/year). An index to the technical report citations published by DOE, Energy Research Abstracts (ERA), is distributed to depository libraries.

DOE officials have proposed that selected depository libraries be provided online access to the DOE Integrated Technical Information System (ITIS). This would provide libraries more current access to the information received on fiche, greater search capabilities than possible through ERA, access to authority and other files internal to Office of Scientific and Technical Information (OSTI), and the ability to create electronic cataloging information (in LC/Machine Readable Cataloging format) for those documents the library receives.

Programming to provide online access to ITIS would be accomplished under the supervision of the DOE (OSTI). It would be carried out in two steps. The first task would require enhancing ITIS to allow depository libraries to search authority file information and bibliographic records created by DOE during the past year. Secondly, a "gateway" would be developed to enable users to automatically switch to a commercial system to search older Energy data base materials. Depository libraries could use existing programs to convert DOE bibliographic records into MARC format, which is the standard format used by the library community.

During the second part of Phase I, a study would be conducted to determine the optimum media (microfiche, CD-ROM, floppy disks) for distribution of the aforementioned DOE contractor reports to depository libraries. Alternatives would be evaluated on such factors as cost, usability, practicality, and timeliness.

This project would provide significant benefits for depository libraries. The libraries would have: (1) more current access to indexing (months before the paper ERA is distributed to

depository libraries); (2) increased search capabilities (i.e., more access points); (3) retrieval capability for related information; (4) electronic cataloging information that is currently not available. (GPO is not cataloging these publications in the LC/GPO cataloging format and this material is not part of the Monthly Catalog of U.S. Government Publications.) The development and application of this system could allow realization of significant cost savings at each depository library.

COST PROJECTION: DOE officials have proposed that GPO reimburse DOE for development costs as well as use of the DOE computer by depository libraries for the duration of the project. One-time costs, in the amount of \$100,000, would cover expenses for personnel and other resources needed to adapt the DOE computer system for use by depository libraries, develop the gateway for accessing commercial systems, and conduct the feasibility study for the format of DOE technical reports. The cost for searching files on the DOE computer would be \$16 per hour. Based on 20 libraries searching the DOE computer for two hours a week, the annual recurring cost to GPO would be \$33,280. This expense would be slightly offset by a savings of \$2,155, if participating libraries no longer received printed copies of Energy Research Abstracts. Libraries that choose to utilize commercial systems to search for older DOE materials would pay for those services at the going commercial rate (currently \$85-\$120/hour).



Publication Title: Energy Research Abstracts  
 Source Agency: Department of Energy

Project Description: Phase I - Develop a "gateway" to provide 18-22 depository libraries online access to bibliographic files residing on the DOE computer and perform a study to determine the optimum format (e.g., microfiche or CD-ROM) for delivery of DOE reports to depository libraries. (Phase II costs would be based on the outcome of Phase I, therefore, no costs are shown for Phase II.)

#### Depository Distribution Cost Comparison:

##### 1. Current costs for hard copy distribution

(Note: Cost estimates shown below are based on printing for Energy Research Abstracts. The DOE data base also contains additional data not currently available in printed format.)

Printing-	\$ 1,464
(\$3.05 X 24 issues/year X 20 libs.)	

Postage-	691
(\$1.44 X 24 issues/year X 20 libs.)	

TOTAL:	\$ 2,155
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##### 2. Costs for proposed study and online system

One time costs to GPO-		\$ 100,000
Project Management	\$ 14,682	
Technology Assessment	\$ 24,882	
ITIS Front End Devel.	\$ 24,900	
Travel	\$ 15,000	
Supplies and Materials	\$ 8,000	
Contingency	\$ 12,536	

Use of the DOE computer for one year		33,280
(\$16/hr X 104 hrs/year X 20 libs)		

TOTAL:	\$ 133,280
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## V. REFERENCES

1/U.S. Congress, Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases, Joint Committee on Printing, Provision of Federal Government Publications in Electronic Format to Depository Libraries, 98th Cong., 2d sess., 1984, pp. (III),10.

2/U.S. Congress, Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases, Joint Committee on Printing, Report to the Joint Committee on Printing, 100th Cong., 1st sess., 14 January 1987, pp.2-3.

3/Ibid., pp.2-3.

4/U.S. Congress, Joint Committee on Printing, Committee resolution, 100th Cong., 1st sess., 1987.

5/Title 44-Public Printing and Documents, U.S. Code, sec. 1901 (1982 ed.).

6/U.S. Congress, Committee on Appropriations, Legislative Branch Appropriation Bill, 1989, House Report 100-621, 100th Cong., 2d sess., 1988, pp.30-31.

7/Title 44-Public Printing and Documents, U.S. Code, sec. 1901 (1982 ed.), p.543.

8/Task Force on Government Information in Electronic Format, Association of Research Libraries, "Technology and U.S. Government Information Policies: Catalysts for New Partnerships," Washington, D.C., October 1987, p.23.

9/Figures are based on the number of depository libraries currently receiving the final Congressional Record (1,295) plus ten copies for claims. Depository libraries that receive the final Congressional Record in microfiche or CD-ROM would be allowed to receive the Index in paper format.

10/Some additional costs would be incurred for developing or licensing retrieval software for the CD-ROM. Software licensing typically requires a one-time payment and/or royalties on a per disc basis.

11/U.S. Congress, Committee on Appropriations, Legislative Branch Appropriation Bill, 1989, House Report 100-621, 100th Cong., 2d sess., 1988, p.30.

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